

## Mate Selection.

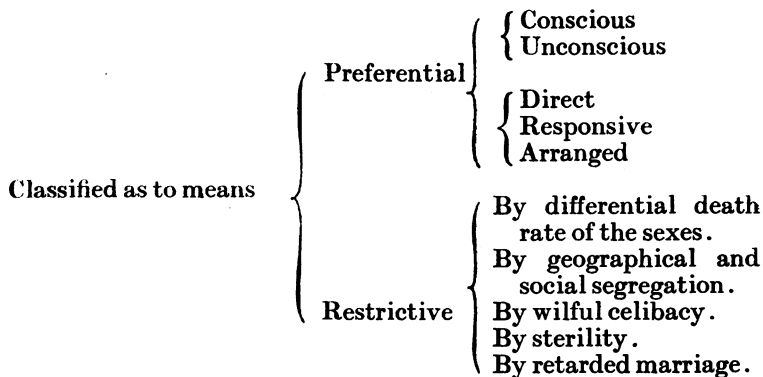
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Mate selection or sexual selection as it was designated by Darwin is best defined as the production of racial change resulting from an hereditary difference between the mated and the unmated, or a correlation between mates. It does not lend itself to classification wholly by direct division and subdivision, but is rather better classified independently on the basis of various criteria. One instance may then come under several heads of such a classification. The following plan is proposed.

Classified as to correlation	{	Optimal	{	Periodic
		Assortative		Secular

In assortative mating the phenomenon of interest is that likes tend to mate with likes. This has the effect, even where all the individuals mate, of accentuating attributes and so increasing the variation of the species as a whole, as compared with what would be the result if mating were wholly at random. The existence of assortative mating in man is quite evident most particularly between those of musical interests, although needed comparative statistical studies are as yet lacking. Its effect is fortunate for it has accentuated high attainments in certain lines, and in cases where the characteristics are undesirable, they have been concentrated in fewer cases more readily located and dealt with.

In optimal mating, selection of mates is more frequent from those possessing a certain degree or the nearest approach thereto, of some attribute with the result that the species in the course of many generations is brought to that degree of that attribute. If this favoured degree is at the mode of the species then there is no evolutionary effect, the effect being merely to hold the species at this optimum. This has been called periodic by Pearson. If the optimum lies to one side of the mode, then the species is led in that direction and the selection is secular, in Pearson's language. The race may thus be carried to an optimum within the range of variation then existing, to one outside the range or indefinitely, when the optimum is either the minimum or maximum possible and lies outside the range.



In preferential selection there is a higher mating rate at the optimal degree, because there is a direct preference for such individuals as mates.

In restrictive selection there is no direct preference but a corresponding result is brought about by the fact that by some means the range of choice is so restricted or controlled that irrespective of preference, sexual selection takes place. One means is by differential death rate of the sexes. A well-known example of this means is in the head hunters of Borneo where fighting between the males reduces their number selectively on the basis of fighting efficiency. Properly this belongs under lethal selection but as a borderland category, is included here. Another example would be the segregation of individuals of differing sorts in different places because of the location of industries, racial distribution and the like, coupled with a varying ratio of sex to sex in different places. The conditions which produce a shortage of one sex will ordinarily do so in a selective way, so that the make-up of the population of that sex shows a different average of the attributes in question than if it equalled in numbers the opposite sex.

Preferential selection may be conscious or unconscious. By conscious selection is meant direct conscious discrimination. By unconscious is meant those cases where preference results from a competition in the attractiveness of potential mates in which the selector simply feels more "drawn" by one individual than by another without any analysis of the elements. The two processes may be mixed and there is doubtless a twilight zone.

During the course of courtship there is a change. At first preference is more purely a matter of weighing of attributes, but as the emotions become more and more involved, the analysis of attributes is so dulled as to give such truth as does apply to the old statement that "Love is blind." As a result the process as a whole is by no means devoid of conscious discriminative preference.

Mate selection is "responsive" when an individual of one sex is stimulated to greater attractiveness in the presence of one individual of the opposite sex than before others. That this stimulation is in some cases in part manifested by increase of pulse is responsible for the conventional association of the heart with love. It is here that the woman has a more active role in courtship than is usually supposed.

By responding more effectively to a certain man, this man is in time drawn to her more than others who do not evoke either her unconscious stimulation or effort to be attractive. This then on the part of the selected may be unconscious or planned.

Preferential selection is "direct" when the mate prefers one over another candidate. It is here distinguished as "arranged" when the preference, whether conscious or unconscious is by the parents, guardian, or friends, or even a broker. These may arrange the match direct or arrange to bring into acquaintanceship under propitious conditions the individuals whom it is desired to mate.

The elements of preference are not all of equal desirability racially nor of equal interest eugenically. Some eugenists have shown greater concern over physical characteristics. This is not shared by the writer because with all possible humanitarian mitigation, lethal selection is still sufficiently active to prevent serious physical retrogression. On the contrary, to eugenics alone can we look for salvation from a serious decline in the mental and moral attributes of the race.

The role of physical attractiveness in sexual selection is of paramount effectiveness. In pointing this out, Knight Dunlap has gone further and expressed satisfaction that beauty is the leading element in mate selection. Beauty, however, embraces two classes of elements towards which our attitude must differ. In so far as good color, clear skin and normal weight for the size in both sexes and adequate width of pelvis in women produces beauty it need not be begrudged its effectiveness. But in reality such elements of beauty are quite common and contribute only a small part of the effective ensemble. The other elements, while of great effectiveness, especially in selection of women, are mainly merely details of facial shape and that distribution of adipose tissue most in vogue at the time. The great effectiveness of these feminine elements so stimulate a man that he neglects to allow, on the average, a proper weight for elements which vastly transcend them in importance. Therefore sharp issue is here taken with Dunlap in his contention that beauty consists mainly of items of important racial value and therefore should properly be the leading element in mate selection.

Those mental traits that are most stimulating are the most effective. Hence vivacity leads. Doubtless the selection for vivacity was useful, but it may easily have gone too far in some strains. It is by no means a measure of mental efficiency and is frequently associated in its highest degrees with instability and hyperthyroidism. Indeed it seems probable that much of the instability, neurasthenia and mental disease of to-day is the result of the relative over-effectiveness of vivacity in mate selection. Luckily in the selection of males vivacity yields more to a consideration of the fitness of the man as a steady provider.

On the other hand, the non-stimulating qualities—stability, persistence, endurance, poise and judgment are undervalued traits. The young man especially, as he more than the young woman is too susceptible to mere physical charm, should be on his guard against the under-valuation of these traits. For every slight advantage in beauty and vivacity he obtains in his mate he is, on the average, foregoing a

much larger degree of important excellences in other lines which are less stimulating.

It is commonly alleged that men prefer to marry women of intellectual capacity inferior to themselves in order that their feeling of leadership may not suffer. This in my opinion is incorrect in the long-run, since mental alertness, fortunately unlike some other mental attributes mentioned, does have a stimulating effect and hence is effective without the necessity of conscious preference.

Public record of the high scores in the systematic mental testing now becoming common would have a decided value in making more evident mental differences now hard to discriminate and recognised only within a circle of acquaintances.

The accomplishment of the sought and the accomplishment and longevity of ancestors, uncles, aunts, brothers and sisters may also well influence one's judgment in mate selection.

It is the fashion to decry the influence of family and wealth upon mate selection and of course the individual herself or himself should be the main consideration. There is, however, some degree of positive correlation between social and financial status and the directly desirable qualities, so that we may be less concerned with these less personal qualities than by the over-emphasis mere physical attractiveness.

Repute in men, and to a less degree in women, is of high selective value and has enough correlation with desirable attributes to be of real eugenic value. Since the standards of desirability and the relative rank in repute of various attributes are subject to change, it is of moment to the eugenicist to inquire into the causes of these changes. In general there is a competition between the groups superior in each of several traits who wish their particular excellence to contribute as important an element of repute as possible. This conflict goes on between those who glory in their birth either in the nobility or in an "old family," those who wish appreciation of their wealth, and a third group of "intellectuals" not included in the other two groups. This last is sometimes subdivided into artistic, literary, scientific and "public spirited" groups and even into subdivisions of these. Each group yearns to be relatively highly appreciated. The repute accorded to these elements varies with time and place and is ever in a state of flux. Parallel with this "struggle" between groups of superiors is another effective between the superior and the mediocre, who decry, either directly or more usually by imputation, generally unfair, of some questionable quality such as snob, high-brow, big-head, "aristocrat," blue stocking, swell, "high and mighty," pedant, "holier than thou," Goo-goo, and the like.

These phenomena are more easily examined in under-graduate life, especially that of the interesting effort of mediocrity to avoid recognising excellence. We have the mediocre students calling those who lead in class "greasy grinds." At Dartmouth the epithet "wet" probably from the wet towel around the head originally synonymous with "greasy grind" has been extended to deride any brilliant student. One reason for the derogation of mental excellence is to permit a relatively higher repute for athletic prowess and for "camaraderie," but it is largely an attitude of the mediocre for their own protection.

Since the majority are relatively mediocre and are all seeking solacing thoughts, the idea of underestimating the excellence of those superior will always be of great seductiveness. This makes more difficult the upholding of the best standards of preference in mate selection.

Yet at different times and places society has shown itself capable of disproportionately high productiveness in one field of activity or another. This has been partly the result of the varying distribution of man's approval of the different attributes for a greater share of repute. Thus oratory and athletics in Greece, military prowess in Rome, and the arts in the Italian Renaissance, and later scholarship and research in Germany and wealth in the United States held in succession places higher in man's esteem than had been the case. The significance for mate selection lies in the relative rank of the various elements of repute of the time and place under consideration and here social progress and racial progress are nearly hand in hand, for an excellent distribution of the elements of repute favours each. Indeed the best distribution for one is nearly the best for the other.

One divergence only arises. One commonly hears it said that some specially gifted individual might accomplish more for immediate social progress if childless or possibly even if celibate. This has led a few "feminists" to protest against the dictum of the eugenists that all superior persons should adequately reproduce. At this point the eugenist appeals confidently and urgently for the ultimate benefit of the species. This is best attained, in the long run, by the adequate reproduction of even the specially gifted, for their superior germ plasm will yield in the future proportionately greater social and intellectual contributions because produced from a long succession of persons produced from that chain of germ plasm than the additional social contribution made possible by the one life because of its celibacy, with a resultant destruction of valuable germ plasm.

A unique feature of preferential mate selection has arisen in recent years by the introduction to our species of the method of artificial impregnation now well known and not infrequently practiced in the case of horses. The author is reliably informed that in one of the largest American cities many women whose husbands are sterile now resort to a certain physician who inseminates them artificially. As is natural, these women stipulate the race of the father whose identity they rarely know. In some cases they are further concerned with his quality and attributes. It is obvious that this physician has a very heavy responsibility in thus determining the quality of many of these offspring. If he will, he can render a very valuable eugenic service by declining to inseminate inferior women and by obtaining the best fathers possible.

Writers on mate selection have usually assumed that rectification and intensification of standards of preference is the sole objective of eugenists in this field. This error arises from too intent a concentration on the analogy of lower animals. In man especially in recent years wilful celibacy and childless matings have become relatively important elements.

Celibacy has varied in its causes with the years. Formerly it was

mainly religious and such celibacy still persists, although it is, I believe, on the wane. Such celibacy has cut off two groups from parenthood. One was inferior because it contained those actuated merely by a desire for the protection and physical inactivity afforded religious celibates and their easy life. The other group was superior because for a long period, and still to some extent it has been composed mainly of the brightest and most idealistic boys in a family who were led to train for the priesthood.

Once the churches now having the priestly celibacy realise how the success of their own cult is reduced by breeding away from the qualities they desire, its abandonment will command an ever growing sentiment among its leaders.

But it is the newer celibacy that is more distressing—that evidenced by the low marriage rate of many superior women. The evidence concerning women college graduates has been easy to obtain, and these may be taken to represent the group. Here we apparently have the joint result of two unfortunate difficulties—first the overvaluation of mere physical attractiveness by men as elsewhere decried. Nearly as important is the inefficient standard on the part of these women by which they respond only to potential candidates whose qualifications are made so high as to render their number so greatly restricted that the chance of marriage is seriously reduced. Mathematically we may express it as follows. A woman who ranks thirteen where one is the most superior and one hundred the most inferior, who feels no mating interest in any man less than rank six reduces her chances of marriage to less than one-half and therefore acts dysgenically. Theoretically such a woman while young may well have an excessively high standard, but as her mating years pass, her standard should step by step slacken so that she marries, provided only that the average quality of her mate is not actually so inferior as to make the average of the couple below mediocrity. In other words, a superior woman to-day needs to be more concerned with marrying and less with the standard of preference, unusual as that sounds from a eugenicist.

Direct admonition is of course relatively unimportant in modifying customs, so it behoves us to examine the conditions prevailing to see if any of these are being modified or are modifiable. Some of the causes of this low marriage rate are:

1. Isolation of sexes by separation in their schools, organisations such as Y.M.C.A. and Y.W.C.A., and even social clubs.
2. Segregation in their work largely with women and married men.
3. Limitation of proper avenues for widening acquaintance, on the one hand in small towns and on the other in the large city. The War Community Service did a great deal to bridge this difficulty temporarily and some of its work has left permanently surviving institutions and customs.

Passing to a consideration of restrictive sexual selection, several elements which reduce the number of effective mates, require consideration.

1. Incontinent celibacy.
2. Inherent sterility.
3. Sterility the result of disease.
4. Induced sterility.
5. Prevention of conception.
6. Retarded marriage.

The incontinent celibate is usually the parent of few or no surviving children. This may be due to infection, sterility of the temporary mate, greater efforts to prevent conception, or in case of conception, greater readiness to abort. Furthermore, offspring of such a union are often still born, or die prematurely because of syphilitic infection, so that concern with this class from a eugenic standpoint is mainly to keep superior young persons from finding their way into it. With the improvement of the prophylaxis and treatment of the venereal diseases, births will tend to become more common from this group of incontinent celibates because sterility will be decreased. Such a condition will demand more rigorous attention to a feasible progress of restrictive eugenics.

Unfortunately, many otherwise desirable individuals are inherently sterile, nevertheless it is probable that on the whole there are more inferior than superior individuals in this group. Sterility unknown to the other mate at the time of marriage should be a proper ground for divorce for those who desire it.

Sterility the result of disease may be classified into that resulting from venereal diseases and that from other causes. The latter may be passed as relatively unimportant.

This former group may be divided into those individuals infected as the result of their own moral transgression and those innocently infected by non-sexual contacts or by infected mates.

Those infected as a result of moral transgression will average inferior, to judge from the nature of the inmates of genito-urinary wards of hospitals as compared with the other wards, as affirmed by Capt. Popenoe from his experiences in army hospitals. Venereal infection is particularly important in holding down the spread of some inferior races that would otherwise be very fecund. Should the venereal diseases ever be effectively treated or prevented, it would be very important that means of birth control be diligently spread among the married couples of such races.

As to those innocently infected, one concludes that they average inferior from what is known of assortative mating.

This class of sterility then on the whole is eugenic in its selectional effect.

Permanent sterility without impairment of sexual functions can be produced in each sex by operation and by other means and has been so produced voluntarily to permit more sexual freedom by a few. Some eugenists have been concerned lest this practice might become so common as to endanger the birth rate.

But since the sterilised, as a whole, would average decidedly inferior, at least in some important attributes and since the general birth rate could well stand some diminution, this practice does not at present seem inimical to race progress.

It has been argued that a wider knowledge of the prevention of conception will too generally result in childless or inadequate families among the superiors. The passing of laws against the dissemination of such knowledge is not the way to meet this difficulty, for such knowledge, long since common property in Europe, has already reached, in general, the superior group in American cities. Such knowledge is of such great eugenic usefulness when once thoroughly widespread that the suppression policy should be abandoned, even though for a time population might cease to increase. Our effort in this connection should be made to distribute its application on a eugenic basis.

Since a retarded marriage often reduces the number of progeny and always lowers the rate of increase per century, the effectiveness of such matings is decreased and it may be considered under this head of restricted sexual selection. Evolution is produced if among the mated there is an inheritable difference between those of early or normal mating time and those of retarded mating time. Such evolution is of course in the direction away from the attributes of the retarded unless counteracted by lethal or fecundal selection.

The late married certainly do differ from other mates and the applied eugenicist is concerned because one important group of the late married result from prolonged full time education, especially in the medical profession. We may therefore well plead for (a) more part time education in proportion to the full time education in those of marriageable age, (b) a restriction of full time law and medical students to two years' college before his four or five years of professional study, (c) laws prohibiting marriage under eighteen to help correct the balance from the other end.

The leading conclusion of this paper as it affects applied eugenics is "Select the best available as to the most important attributes." To this older well known maxim we now must add a second "All superiors should mate."

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